

To Charles Irby
Wendell Shultz

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From Betty Burr

Location Palo Alto

Subject Functional Specs

Organization SDD-Palo Alto

XEROX

Following are some of my comments on
the current version of the Janus-1 F. S.

MISSING PROMPTS: As specified, Janus supplies insufficient prompting for the unsophisticated user. Whenever the system requires the user to supply information other than text input, a prompt is called for. This is particularly true on option sheets unless the item listed is exceptionally clear. For example, on the print option sheet, if the user specifies special forms, a prompt should request the name of the form.

These prompts will be very helpful to the beginning user and will not impede the experienced user, since all such prompts would appear in the Message/Response area of the screen.

COMMAND LANGUAGE: some terms are far too sophisticated and would not be in the vocabulary of the low end Janus users; other terms do not sufficiently explain the meaning or options to which they are connected. Specifically:

Window Commands:

Set window: implies change to window. Actually means change to view of document. Should be WINDOW VIEW or DOCUMENT VIEW.

Reset: by proximity to Set Window command implies reset of window, but actually means ERASE or CLEAR CHANGES.

Shrink: should apply only to windows that can become icons. It should not cause any other action to happen such as the applications that result from this command in Reset Parameters and Abort under System-wide features. Eliminate the *Shrink* command from option sheet windows; substitute FINISHED.

Execute: The word *Execute* is too sophisticated. I suggest DO IT.

Do It: should appear in any window in which an action must be confirmed. (e.g., print option sheet). If such a window has a *Finished* option associated with it, the user must be prevented from inadvertently shrinking the window without invoking the action if action is desired: when the *Finished* option is chosen without the *Do It* option, the system should prompt the user that no printing has been ordered "No printing has been requested. Are you finished with this option sheet?"

Destroy is too dramatic. I suggest DISAPPEAR.

Aggregate and *Disassemble* should be GROUP and SEPARATE.

KEYS

Help: It is imperative that the Help key not have the Syslog on it. It would be too easy for the user to stumble into the Syslog when already confused enough to need help!!!

Clear and *Apply* keys: this combination seems unfortunate. If the shift lock happened to be invoked, the operator would get the exact opposite of the desired effect!

Abort should be STOP and should be an emergency terminate, as the word implies. It should NOT be used in text editing to indicate completion of Move and Copy commands.

Keys for setting carriage: Users think of margins as left and right, not *start* and *end*. Use L and R. Find other notations for tabs. Better yet, follow the suggestion to use code + number to avoid multi-national problems. Numerical keys should then have inscribed notations indicating use of each key in carriage setting.

MOUSE BUTTONS

The names *Fine* and *Coarse* should be changed to SMALL and LARGE, since the latter are more descriptive of the actual purpose of the button name assignments.

The concept of use the left and middle buttons of the mouse for selection (by whatever name) should be consistent. As specified, the named buttons are used for positioning as well as selection. Positioning should be possible with either button. Specifically, in the Move and Copy functions in graphics, the user must position the symbol with middle for gridpoints and left for arbitrary positioning. Since the logic of large and small relationships is not obvious in positioning, the scheme should be: if the grid is selected, the symbol is positioned on grid points; if it is not selected, the symbol is arbitrarily positioned.

Text Editing:

Cursor for paragraph selections: should be paragraph symbol, as in Bravo, to afford user additional visual support. The cursors for line selection and paragraph selection should not be the same.

Default display for text editing: should be continuous fill-in with the "holes" routine provided as an option. (See memo from Mal Williams on this.)

Corrective Typing, Shift/Code space, backspace, etc. A potential user confusion exists in the presence of of both code and shift characters for space, backspace, and backward. Two possible solutions are:

- 1) code space, backspace, etc. for special character insertion be maintained to be consistent with other code characters, but some other combination of keystrokes be identified for corrective typing.
- 2) in the absence of a better keystroke combination, the options for the various use of the backspace and backward keys should be inscribed on the front of the keys. (This would be desirable in either case.)

Grayed caret in corrective typing: appearance will be very confusing to the user. It is the only time such a character appears. If the caret always represents the insertion point, the user will expect it to move with the shift backward/backspace action to the point of change. I suggest that some marker other than a caret be used to indicate the previous insertion point in corrective typing; perhaps a solid bar (somewhat like the Bravo tab indicator.)

Search function: every attempt should be made to make the necessary operator input as clear as possible. The use of "*" and "***" seems too obscure. I suggest *abc---def*, or *abc...def*.

Named Styles, Abbreviation Expansion, Frame Styles--remembering them: The usefulness of these features is tied to the ease with which the operator can insert them from the keyboard without reference to option sheets. Summaries of available styles or abbreviations should give detailed information about those possibilities and should be accessible from the keyboard. The HELP system might be invoked at this point: when the operator hits the STYLE, FRAME, or EXPAND key in conjunction with the HELP key, the system will bring up a window listing the options in each case. The options will include all formatting information for each style.

FIELD DEFINITION

Effective use of the Janus field fill-in function is completely dependent upon proper field definition. As specified, field definition implies a very sophisticated operator. I believe such a person will not be available in the small office and that training a non-specialist in field definition as specified will be very difficult.

Field definition should be aimed at a standard office worker, or, at best, an office supervisor or WP supervisor. Janus should provide a highly interactive program for field definition involving heavy use of aids to the definer: prompts, examples, requests for and definition of field definition terminology. Coupled with a specialized training package, such a program would allow a non-specialist to define fields and forms.

FILE MANAGEMENT

I support the view that requiring users to type in file names can lead to many difficulties, especially increases in errors, requirements for the user to remember unique file names. Peter Bishop has summarized many of the issues in his memo.

In addition, I propose a concept of a Master Directory Disk to assist the user in locating files that may not be currently located on the system disk or the mounted document disk without having to cycle through various document disks to locate what she wants.

The Master Directory Disk would exist on the desktop as a separate icon (like a separate file drawer) and would correspond to a special floppy disk which contains a complete record of all entries on all the user's document disks. The Directory would be updated from the disk directories on each document disk (file drawer). The procedure for this action would be:

When the user attempts to unload a document disk, the system prompts for the updating of the Master Directory: *Do you wish to update the Master Directory? Y or N.* If the user types *Y*, the system prompts: *Please load Master Directory Disk.* If the user types *N*, the system provides no more prompts, but places an icon on the desktop to indicate the presence of an unfiled disk directory. When the user views the desktop, she will be reminded to update the Master Directory by the presence of the disk directory icons. (Fig.1)

If the user elects to update the directory (types *Y*), the system updates the Master Directory Disk by writing the document disk directory onto the Master Directory Disk, checking to see which documents have been changed or added, and changing the directory accordingly. (Fig.

2) No icon is left on the desktop. (Fig. 3) If the user elects not to immediately update, the same procedure is followed when update is done, and the icons on the desktop disappear.

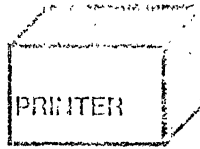
SYSTEM LOG

The proposed use of the system log to provide users with more information about hardware and software errors seems inappropriate for the naive user. Reading the log of error messages with its technical information would do little to allay the fears of the user and would not inform the user of what to do. I see no need for the user to ever display the system log; that should be the prerogative of the tech rep only.

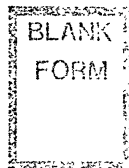
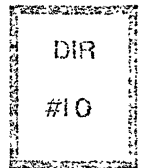
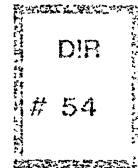
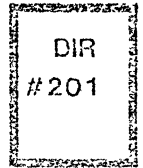
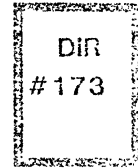
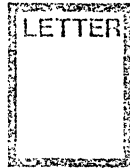
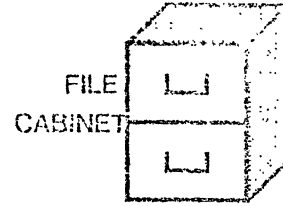
Instead, when an error occurs, the Message/response area should tell the user of the error in very non-technical terms and should advise that the user call HELP. (Note: The HELP functions have not yet been written; this suggestion will be incorporated in the full Help section.) Calling Help (hitting the HELP key) triggers a routine in which the error is noted and appropriate information from the Help system is displayed in the Help window. E.g.:

Msg/Rspnse: Your system disk has errors. Press the HELP key for more information.

HELP Window: The Scavenger program may be able to correct the errors on your disk. Run it by.....(Commands for Scavenger) After your run Scavenger, try again to take whatever action you were trying when you got the error message. If this does not work, get a new system disk.



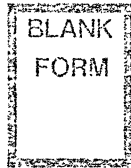
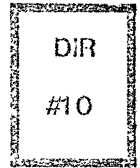
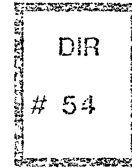
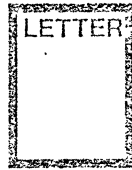
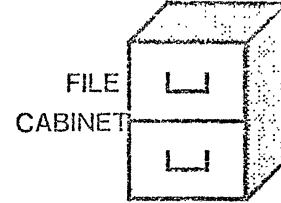
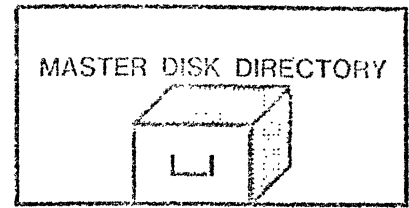
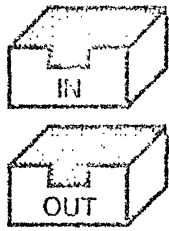
MASTER DISK DIRECTORY



STATE OF DESKTOP

WITH UNFILED USER DISK DIRECTORIES

Figure 1

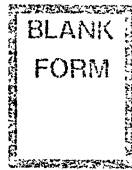
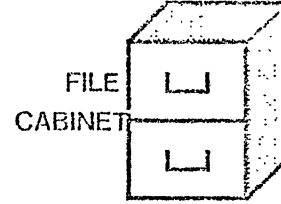


STATE OF DESKTOP
IN THE MIDDLE OF PROCESS OF FILING USER DISK DIRECTORIES
ON MASTER DIRECTORY DISK
(Master Disk Directory icon highlighted)

Figure 2



MASTER DISK DIRECTORY



STATE OF DESKTOP

AFTER USER DISK DIRECTORIES HAVE BEEN FILED

Figure 3